

## Together for Emergency Medicine in the United Arab Emirates!

Saleh Fares

Founder and President, Emirates Society of Emergency Medicine

As I began writing this article, I was stunned realizing that September 2019 marks the anniversary of a ten-year journey for the specialty of emergency medicine (EM) in the United Arab Emirates (UAE). I had returned home to the UAE after 17 years' acquiring and refining knowledge and skills as well as building experience and expertise abroad. This included medical school studies in Ireland,<sup>1</sup> an Emergency Medicine (EM) Residency training in Montreal, Quebec<sup>2</sup>, a Prehospital Care fellowship in Toronto, Ontario,<sup>3</sup> a Disaster Medicine fellowship in Boston, Massachusetts<sup>4</sup>, and finally a public health graduate degree in Baltimore, Maryland<sup>5</sup>. Throughout that time spent in nations where EM was well-developed, I was persistently asking myself, "What can I learn from here to allow me to develop EM back home?". This challenging journey was certainly exciting and beneficial and exposed me to so many different "systems", to their strengths and weaknesses, to the different approaches used to address problems, needs and day-to-day operations, and reinforced my belief that there is room and a need for flexibility, variability and diversity in the EM models one could build.

This stimulated me further to try and explore what could be a suitable model for "our" emergency care system in the UAE and the region. My focus was always at the "bigger picture" and how can we put the pieces together. The systems mentioned above were in different stages of development and have gone through similar challenges to what

**Keywords:** emergency medicine, development, United Arab Emirates, health

Correspondence to:

Saleh Fares  
saleh.fares@gmail.com

we are facing in the region. The complexity of the Emergency Medical Care reminds me of the philharmonic orchestra<sup>6</sup>. Although it combines numerous instruments from different families, it can produce an outstanding piece of art "*only if*" everything is synchronized. This would not have been possible without having the critical elements of success, namely the knowledge, the training and the skills, as well as the practice, its resources and its tools, and, above all, the clear command and control.

Looking at the Emergency Care in the UAE specifically, and the Middle East in general, makes you realize that there have been several genuine regional efforts to develop the specialty over the years, all driven by the needs and pressures of the public.<sup>7-21</sup> Although several initiatives have managed to build parts of the system, it was faced by frustrating disconnections from other crucial components that serve the same purpose. A typical example I frequently encountered at the time, was the emergency physicians' frustration from the suboptimal prehospital care which occurred in some cases, and on the opposite side, I also hear the paramedics' teams complaining of their inability to communicate with the Emergency Departments, pre- or post-care. Another example can be the frustration of the both hospital and prehospital emergency providers from the burden of trauma in their practice; yet there has been limited activity targetinh the development of a cohesive reliable trauma system that can connect and secure all the important elements. The list can go on. We needed to develop a functional reliable system and not only a number of its components. We needed to establish and develop an Emergency Care System with its critical components: the governance, the prehospital care, the hospital care, and the system-wide elements. I intentionally focused my Master of Public Health (MPH) capstone at Johns Hopkins Bloomberg School of Public Health on that same

topic and highlighted the challenges and the opportunities of our system.

Upon my return to the UAE, I was fortunate to be able to discuss the status of the emergency care and the challenges voiced by my colleagues and also the outcome of my MPH with senior officials. Interestingly, they were very positive and eager to support whatever it takes to develop an efficient system. This was obviously driven by numerous factors, including the rapid evolution of the healthcare sector in general and the importance of having an equivalent emergency system to support that. Other factors could be the pressure from the community on the government to provide reasonable care in case of emergencies. At that time, the government was keen to build a robust and resilient system. Therefore, we used that vision to bring some focus on the emergency care projects, and we managed to shed some lights, under the objective of “Disaster Preparedness.” I recall several meetings where we had to convince officials that building “a trauma system” will serve as a strong backbone to their coveted Disaster Preparedness. With this approach, we were able to secure some funding for trauma care training and to establish the first regional Trauma Registry in the UAE, in the Emirate of Abu Dhabi, with over 20,000 cases to date. We also used this as an opportunity to successfully submit and pass our own national form “Good Samaritan Law.” This followed several incidents of unfortunate outcomes due to the lack of bystander first aid assistance, which had widely received the community attention. ESEM used this opportunity and conducted a panel discussion on December 2016; involving the Ministry of Health, the Ministry of Justice, EMS providers and Non-for-Profit organizations; This resulted in official recommendations that we then submitted to the national government.. Although slower than expected, the approval process is steadily moving forward; and ESEM and its partners in this initiative are making every effort to expedite it. Additionally, ESEM collaborated with other national stakeholders to promote and secure the recent establishment of local STEMI and stroke programs. Several other initiatives followed the same approach of using opportunities to seed ideas or start a project, that

can add more pieces to the bigger picture. Today, ESEM has become a well-respected national and regional entity by the UAE government and the GCC; and the collaboration will hopefully continue for years to come.

I cannot describe EM in the UAE without highlighting the great work which has been done by our prehospital care colleagues. The enthusiasm I feel every time is something we should all be proud of. Despite their obstacles and difficulties, they fight vigorously to improve their performance, and there is a comforting cohesiveness among the different providers. After several mass casualty events in the country, we worked with the Ministry of Health (MOH) to establish a taskforce to focus on coordinating emergency medical efforts during disasters. A ministerial decree formed the taskforce in 2016 and appointed three teams to focus on Command and Control, prehospital preparedness and hospital preparedness. The three teams report directly to the Undersecretary of the MOH and have managed to progress in several levels and directions. The prehospital providers played a crucial role in the success of this project and contributed tremendously over the years in many other projects.

A missing cornerstone for the advancement of emergency care was the lack of official professional representation of “Emergency Medicine” as a specialty in the country. Many people underestimate the importance of having a national society to unify the efforts and set the agenda for the future. I was blessed to be surrounded by talented colleagues who shared the same interest and immediately answered the call towards the foundation of our society, the Emirates Society of Emergency Medicine (ESEM). With just 28 emergency physicians and EM residents, ESEM was officially announced on August 28, 2012. This was a landmark step in our journey and reshaped the way we think. We immediately applied for and secured membership as a voting member with the International Federation for Emergency Medicine (IFEM)<sup>22</sup>. Within just two years, the first ESEM board was able to gain some momentum by increasing the memberships to over 300 members, launch a website, social media accounts, conduct several community outreach programs and workshops. The first edition of ESEM

annual scientific conference was in December 2014 with over 600 delegates. The ESEM conference now attracts over 1200 delegates from all over the world and became one of the leading Emergency Medicine (EM) conferences worldwide and the most significant EM in the Middle East and North Africa (MENA) region. For ESEM, the conference was not just a scientific meeting, rather an excellent platform to exchange ideas and showcase our local abilities. We wanted the conference to aim for international standards in term of the content and the way it was conducted. The scientific and the organizing committees work for months every year to put together an evidence-based and up-to-date conference. The tracks and the workshops focused on building fundamentals and essential skills for emergency providers. We involved EM residents and medical students as volunteers and that by itself build an outstanding team, along with the organization and scientific committees, as well as the other committees involved. The exceptional success of the first two conference editions encouraged us to bid for IFEM's leading conference, the International Conference for Emergency Medicine (ICEM). We were honored to win the bid to host ICEM 2021 in Dubai, something sharply boosted our energy to do more and assured us that we are going in the right direction towards developing EM in the UAE. We used the ESEM model to encourage other regional societies to work together, and we made sure that there is a local representation from as many countries as possible at our conferences. Such professional gatherings were indeed very productive and resulted in exciting projects. The main project that came out of the ESEM conference networking was the foundation of the Gulf Federation of Emergency Medicine (GFEM). ESEM proposed the idea during the ESEM 2014 conference, and the federation was launched in 2017.

The federation consists of the 6 Gulf Corporation Countries (GCC), namely the UAE, Bahrain, Saudi Arabia, Oman, Qatar, and Kuwait. To encourage EM in Bahrain, the UAE passed its term as chair of the federation to Bahrain, with Dr. Ghada Alqassim as the first general secretary of GFEM and Dr. Asaad Shuja from Saudi Arabia as her deputy. It was agreed that the appointment of the general secretary and the deputy would follow the

GCC official sequence as stated above, and both should serve for two years term<sup>23</sup>. The deputy is usually from the upcoming country that will lead in the next term, and their own national societies nominate both positions. GFEM was approved as an Ex-officio member of IFEM in December 2017. The vision for GFEM is evident as it is meant to coordinate and promote collaborative efforts and activities among the member countries and to support and boost the specialty of EM throughout the GCC. With that, GFEM has a vital regional role and will need activism and leadership commitment and contribution to succeed.

In the meantime, in the UAE, the society wanted to tackle crucial aspects of EM; therefore, the board formed several committees to address various challenges and needs. The committees included ED administration, emergency ultrasound, toxicology, prehospital/disaster medicine, women in EM, and EM-interest group development. That list undoubtedly grew as the specialty matured. A major challenge of any professional society lies in the availability and commitment of its members. It is hard to secure dedicated time from members given the nature of our specialty, and our family, personal and social obligations. For a society and specialty to prosper, we need to directly or indirectly answer an important question that frequently comes from our colleagues: "What's in it for me to join the society?". Although some expect short-term benefits, many continued to share the belief of the long-term value of a society, namely to support the specialty. We tried to the best of our abilities to be as inclusive as possible and to reach out to the different emergency providers; namely physicians, nurses, paramedics, residents, and medical students. Our efforts reached out to different parts of the countries, and we offered free registrations to hundreds, if not thousands of providers over the years. We figured such participation in our educational activities would help them all deliver better emergency care. We also focused on identifying excellent speakers and involving them in our activities. This was a good motivator for many and generated an encouraging interest over the years.

At an academic level, EM has progressed rapidly in the country. Currently, 4-year programs

residency programs are accredited by the Arab Board of Health Specializations.<sup>24</sup> The first program was launched in 2008 in Tawam Hospital, at Al Ain City under the leadership of Dr. Abdel Noureldin, one of the pioneers of EM education in the UAE. Several programs were established since then. The UAE currently have five programs in total and a sixth one in the pipeline. The five programs are Tawam Hospital, Mafraq Hospital, Sheikh Khalifa Medical City, Rashid Hospital, and Zayed Military Hospital. We have over a hundred residents in total, and several more graduated and have worked in the country. To make EM as an attractive specialty to pursue, we organized several “EM awareness” sessions for medical students, in collaboration with their universities. We also added individual tracks at the ESEM conference dedicated for residents and medical students. This effort was an essential step to make EM programs one of the most competitive specialties in the UAE. It was important to teach future generations about EM as a specialty, the importance of it, the lifestyle of emergency physicians, its future opportunities, and even how to prepare a resume or to get ready for an interview. We also included medical students and residents as volunteers in our activities to make sure they feel the vibe of the specialty. Our local programs receive hundreds of applicants yearly and have become highly competitive with a strong reputation. Several programs are accredited by the Accreditation Council for Graduate Medical Education- International (ACGME-I).<sup>25</sup> Such accreditation strengthens the international recognition of our programs, and hence provides our graduates additional and better career and academic opportunities. Currently the establishment of fellowship programs and EM subspecialties are among our top priorities. This is being synchronized with the UAE governmental plans, such as Disaster Medicine, Toxicology, Ultrasound, and Administration..

Another milestone was the launch of the ESEM Newsletter in early 2013 to keep the ESEM’s audience informed about important news and initiatives and, most importantly, seek their engagement. Initially biannual, it is now a monthly edition and disseminated to thousands of people. The ESEM newsletter is currently run by our own

skillful residents; and we hope to grow it into a scientific journal.

Finally, although the picture I have painted may appear rosy, our road is not as easy as it seems. Some of the persisting challenges include the lack of an official body, I mean here within governments, to govern and “own” EM as a whole. This is the primary hurdle and directly reflecting on the inconsistent practices we see daily. Having strong governance should help lead and fund critical projects and basically “connecting the dots” within the system. They should set the tone and serve as the Maestro. This should include advancing EM in rural areas, working on accrediting training programs for Emergency Nursing and paramedicine, improving the ED operations and standardizing and empowering triage systems to divert away non-urgent cases from EDs. As a society, and in association with the government, we need to further promote the value of EM in the healthcare to ensure sustainable funding and cost-effective utilization of the emergency resources. In addition to our advocacy and educational efforts and activities, the advancement of research is a priority. This can include studies of quality improvement measures. Numbers and evidence are most valuable in supporting our efforts to secure resources for emergency care and the specialty!

We still have a long way to go to reach our ultimate goal of having a developed EM system. However, we have the will and the way to move it forward. The future of EM in the UAE is very bright and evident through all the strength and the enthusiasm we have demonstrated so far! The secret of success is to remember that “If you can’t fly then run, if you can’t run then walk, if you can’t walk then crawl, but whatever you do you have to keep moving forward”. *Martin Luther King, Jr.*<sup>26</sup>

## REFERENCES

1. The Royal College of Surgeons in Ireland. Accessed 14 August 2019, <<https://www.rcsi.com/dublin>>
2. McGill Emergency Medicine FRCP Residency Program. Accessed 14 August 2019, <<https://www.mcgill.ca/emergency/programs/frcp>>
3. Emergency Medicine - Pre Hospital/Transport Medicine. The

Department of Emergency Medicine at the University of Toronto.

Accessed 14 August 2019, < <http://www.deptmedicine.utoronto.ca/clinical-research-fellowships?listall=1&divisions=3>>

4. Beth Israel Deaconess Medical Center (BIDMC) Fellowship in Disaster Medicine, an affiliated fellowship of The Harvard Humanitarian Initiative and The National Preparedness Leadership Initiative. Accessed 14 August 2019, < <https://www.disasterfellowship.org/>>

5. Health Policy and Management (HPM) at the Johns Hopkins Bloomberg School of Public Health. Accessed 14 August 2019, < <https://www.jhsph.edu/departments/health-policy-and-management/index.html>>

6. Philharmonia Orchestra. Accessed 14 August 2019, < [https://en.wikipedia.org/wiki/Philharmonia\\_Orchestra](https://en.wikipedia.org/wiki/Philharmonia_Orchestra)>

7. Fares S, Irfan FB, Corder RF, Al Marzouqi MA, Al Zaabi AH, Idrees MM, Abbo M. Emergency medicine in the United Arab Emirates. *I J Emerg Med.* 2014;7(1); 4.

8. Margolis SA, Reed RL. Changing use of the emergency department by the elderly in the United Arab Emirates, 1989 and 1999. *East Mediterr Health J.* 2002;8(2-3):409-415.

9. Koornneef EJ, Robben PB, Al Seiri MB, Al Siksek Z. Health system reform in the emirate of Abu Dhabi, United Arab Emirates. *Health Policy* 2012;108(2): 115-121.

10. Bener A, Al-Salman KM, Pugh H. Injury mortality and morbidity among children in the United Arab Emirates. *Eur J Epidemiol.* 1998;14(2):175-178.

11. Hassan MN, Hawas YE, Maraqa MA. A holistic approach for assessing traffic safety in the United Arab Emirates. *Accident Analysis & Prevention.* 2012;45:554-64.

12. Sasser S, Gibbs M, Blackwell T. Prehospital emergency care in Abu Dhabi, United Arab Emirates. *Prehospital Emergency Care.* 2004 Jan 1;8(1):51-7.

13. Ong ME, Cho J, Ma MH, Tanaka H, Nishiuchi T, Al Sakaf O, et al. Comparison of emergency medical services systems in the pan Asian resuscitation outcomes study countries: Report from a literature review and survey. *Emergency Medicine Australasia.* 2013 Feb;25(1):55-63.

14. Fares S, Zubaid M, Al-Mahmeed W, Ciottone G, Sayah A, Al Suwaidi J, et al. Utilization of emergency medical services by patients with acute coronary syndromes in the Arab Gulf States. *J Emerg Med.* 2011 Sep 1;41(3):310-6.

15. Shaban S, Eid HO, Barka E, Abu-Zidan FM. Towards a national trauma registry for the United Arab Emirates. *BMC*

*Research Notes.* 2010 Dec;3(1):187.

16. Shin SD, Hock Ong ME, Tanaka H, Ma MH, Nishiuchi T, Alsakaf O, et al. Comparison of emergency medical services systems across Pan-Asian countries: a Web-based survey. *Prehospital Emergency Care.* 2012 Sep 7;16(4):477-96.

17. Batt AM, Al-Hajeri AS, Cummins FH. A profile of out-of-hospital cardiac arrests in Northern Emirates, United Arab Emirates. *Saudi medical journal.* 2016 Nov;37(11):1206.

18. Partridge R, Abbo M, Virk A. Emergency medicine in Dubai, UAE. *International journal of emergency medicine.* 2009 Sep;2(3):135.

19. Callachan EL, Alsheikh-Ali AA, Nair SC, Bruijns S, Wallis LA. Outcomes by mode of transport of ST elevation MI patients in the United Arab Emirates. *Western Journal of Emergency Medicine.* 2017 Apr;18(3):349.

20. Cevik AA, Shaban S, El Zubeir M, Abu-Zidan FM. The role of emergency medicine clerkship e-Portfolio to monitor the learning experience of students in different settings: a prospective cohort study. *International journal of emergency medicine.* 2018 Dec;11(1):24.

21. Fares S, Femino M, Sayah A, Weiner DL, Yim ES, Douthwright S, et al. Health care system hazard vulnerability analysis: an assessment of all public hospitals in Abu Dhabi. *Disasters.* 2014 Apr;38(2):420-33.

22. The International Federation for Emergency Medicine. Accessed 15 August 2019, < <https://www.ifem.cc/> >

23. The Cooperation Council for the Arab States of the Gulf. Accessed 16 August 2019, < <http://www.gcc-sg.org/en-us/Pages/default.aspx>. >

24. Arab Board of Health Specializations. Accessed 15 August 2019, < <http://arab-board.org/en/content/emergency-medicine-specialty>>

25. The Accreditation Council for Graduate Medical Education- International (ACGME-I). Accessed 16 August

26. Martin Luther King Jr. Accessed 15 August 2019, < [https://en.wikipedia.org/wiki/Martin\\_Luther\\_King\\_Jr.](https://en.wikipedia.org/wiki/Martin_Luther_King_Jr.)>